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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,360	01/22/2004	Richard Christopher Gass	3864.00	3266

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Stephen R. Greiner, Esquire
GREINER LAW OFFICES, P.C.
Suite 110
6701 Democracy Blvd.
Bethesda, MD 20817

EXAMINER

REESE, DAVID C

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/761,360

Applicant(s)

GASS ET AL.

Examiner

David C. Reese

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

- [1] Claims 1-10 are pending.

Claim Objections

- [2] Claim 10 is objected to because of the following informalities:

In Claim 10, line 10, the term, "there" is slightly undefined. Consider changing to:
"there to the respective shoulder,"

Appropriate correction is required.

Claim Rejections - 35 USC § 102

- [3] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

[4] Claims 1-2, and 5 are rejected under 35 U.S.C. 102(b) as clearly anticipated by Ader, US- 58,743,670, because the invention was patented or described in a printed publication in this or a foreign country, or in public use or on sale in this country more than one (1) year prior to the application for patent in the United States.

Ader teaches of a structural fastener.

As for Claim 1, Ader teaches of a structural fastener, comprising:

a tubular retainer (120 in Fig. 1) being adapted for one-way passage into a socket;

a fastening member (50 in Fig. 1) slidably extending through said retainer (120 in Fig. 1), said fastening member having helical threads at its top (52 in Fig. 1) and a protrusion at its bottom (20 in Fig. 1); and,

a compressed spring being positioned atop said retainer (340 in Fig. 6) for urging said protrusion (20) into engagement with the bottom of said retainer (212D in Fig. 6) and for urging said helical threads (252 in Fig. 7) from the top of said retainer (320 in Fig. 7).

Re: Claim 2, wherein said tubular retainer (324 in Fig. 2) and said fastening member (230 in Fig. 2) are keyed (322, 212, 232 in Fig. 2) such that they cannot rotate relative to one another.

Re: Claim 5, wherein said fastening member (50 in Fig. 4) includes an outwardly extending peripheral flange (40 in Fig. 4) between helical threads (52 in Fig. 4) and said

protrusion (20 in Fig. 4), and wherein said compressed spring (140 in Fig. 4) is coiled about said fastening member (20 in Fig. 4) and **engages the bottom** of said outwardly extending peripheral flange (40 in Fig. 4) and the top of said retainer (124 in Fig. 4).

Claim Rejections - 35 USC § 103

[5] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[6] Claims 3-4, 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ader, US- 58,743,670 in view of Martelli, US-4,810,144.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for Claim 3, Ader teaches of a tubular sleeve (126 in Fig. 1) having a longitudinal passageway slidably receiving said fastening member (126 receiving 20, 10 in Figs. 4 and 8); and,

a wedge fastened to said tubular sleeve (120B in Fig. 4),

However, Ader fails to disclose expressly of said wedge being a bowl with a serrated rim defining a plurality of outwardly and upwardly extending teeth.

Martelli teaches of legs 50...that extend outwardly from the annular portion 46...are adapted to flex axially...The legs 50 have sharp edges 58.

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify the wedge as taught by Ader, to incorporate a set of legs and sharp edges as taught by Martelli, in order to as Martelli suggests in part 3 line 33, "The legs have sharp edges 58, which tend to dig aggressively into the inner wall 24 of the tube 22 so as to resist withdrawal of the second member 30 from the tube 22, and so as to resist rotation..."

Re: Claim 4, wherein said tubular retainer (10 in Fig. 1 of Martelli) further comprises a pair of said wedges (28 and 30 in Fig. 1 of Martelli), one being fastened to the top of said tubular sleeve (30 in Fig. 1 of Martelli) and the other being fastened to the bottom of said tubular sleeve (28 in Fig. 1 of Martelli).

As for Claim 6, Ader, teaches of a tubular sleeve, comprising:
a retainer (124 in Fig. 1 of Ader) including;
a tubular sleeve having a longitudinal passageway (126 in Fig. 1 of Ader); and,
a wedge fastened to said tubular sleeve and having a serrated rim with a plurality of outwardly and upwardly extending teeth (28, 30 in Fig. 1 of Martelli);
a fastening member slidably extending through said longitudinal passageway of said tubular sleeve (10 through 126 in Fig. 1 of Ader), said fastening member having helical threads at its top (52 in Fig. 1 of Ader), a protrusion at its bottom (20 in Fig. 1 of

Ader), and an outwardly extending peripheral flange between said helical threads and said protrusion (40 in Fig. 1 of Ader); and,

a compressed spring being positioned atop said tubular sleeve (140 in Fig. 1 of Ader) for urging said protrusion into engagement with the bottom of said tubular sleeve (Fig. 6) and for urging said peripheral flange away from the top of said tubular sleeve (flange away from tubular sleeve as shown from Fig. 6 to Fig. 7).

Re: Claim 7, wherein said tubular retainer (324 in Fig. 2) and said fastening member (230 in Fig. 2) are keyed (322, 212, 232 in Fig. 2) such that they cannot rotate relative to one another.

Re: Claim 8, wherein said longitudinal passageway (126, 122 in Fig. 1 of Ader) and said fastening member (50, 30, 10, 20 in Fig. 1 of Ader) are provided with close-fitting polygonal cross sections (50, 30, 10, and 20 as shown within Figs. 4 and 5 of Ader, showing the close-fitting polygonal cross sections).

Re: Claim 9, wherein said compressed spring (140 in Fig. 4) is coiled about said fastening member (20 Fig. 4) and **engages the bottom** of said peripheral flange (40 Fig. 4) and the top of said tubular sleeve (124 in Fig. 4).

Allowable Subject Matter

[7] Claim 10 is allowable pending proper corrections to objections (Claim objections) as stated earlier in this action.

The following is a statement of reasons for the indication of allowable subject matter: As for Claim 10, the prior art, incorporating other corresponding limitations as

set forth above, does not teach of the exact specifications of the tubular sleeve with shoulders; pair of wedges with serrated rim and plurality of outwardly and upwardly extending teeth; fastening member with flange, helical threads, protrusion, and keyed portion for slidable positioning; polygonal cross-sections for deterring turning, and spring for urging the above elements in their respective directions as a collective functioning device.

Conclusion

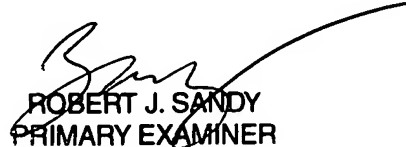
[8] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited further to show the state of the art with respect to this particular type of fastener; as well as their extreme relevance to the current application as many read extensively onto the claimed invention: Gulistan, 3,346,032; Aukzemas et al., US 2003/0175091; Winkler et al., US 2003/0156923; Huber, US 2002/0197134; Frattarola, US 2001/0024607; Mizuno et al., 6,679,666; Kilgore, 6,227,785; Gass et al., D496,852; Brooks, 4,315,361; Martin et al., 3,343,581; Hill, 6,022,009, Neights et al., 4,720,223.

[9] Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Reese whose telephone number is 703-305-4805. The examiner can normally be reached on 7:30 am - 5:00 pm M-Th, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (703) 306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ROBERT J. SANDY
PRIMARY EXAMINER

Sincerely,
David Reese
Examiner
Art Unit 3677